

(A) ATSC digital TV signals: –114 dBm, averaged over a 6 MHz bandwidth;

(B) NTSC analog TV signals: –114 dBm, averaged over a 100 kHz bandwidth;

(C) Low power auxiliary, including wireless microphone, signals: –107 dBm, averaged over a 200 kHz bandwidth.

(ii) The detection thresholds are referenced to an omnidirectional receive antenna with a gain of 0 dBi. If a receive antenna with a minimum directional gain of less than 0 dBi is used, the detection threshold shall be reduced by the amount in dB that the minimum directional gain of the antenna is less than 0 dBi. Minimum directional gain shall be defined as the antenna gain in the direction and at the frequency that exhibits the least gain. Alternative approaches for the sensing antenna are permitted, e.g., electronically rotatable antennas, provided the applicant for equipment authorization can demonstrate that its sensing antenna provides at least the same performance as an omnidirectional antenna with 0 dBi gain.

(2) *Channel availability check time.* A TVBD may start operating on a TV channel if no TV, wireless microphone or other low power auxiliary device signals above the detection threshold are detected within a minimum time interval of 30 seconds.

(3) *In-service monitoring.* A TVBD must perform in-service monitoring of an operating channel at least once every 60 seconds. There is no minimum channel availability check time for in-service monitoring.

(4) *Channel move time.* After a TV, wireless microphone or other low power auxiliary device signal is detected on a TVBD operating channel, all transmissions by the TVBD must cease within two seconds.

[75 FR 75842, Dec. 6, 2010]

PART 17—CONSTRUCTION, MARKING, AND LIGHTING OF ANTENNA STRUCTURES

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AUTHORITY: Secs. 4, 303, 48 Stat. 1066, 1082, as amended; 47 U.S.C. 154, 303. Interpret or apply secs. 301, 309, 48 Stat. 1081, 1085 as amended; 47 U.S.C. 301, 309.

Subpart A—General Information

§ 17.1 Basis and purpose.

(a) The rules in this part are issued pursuant to the authority contained in Title III of the Communications Act of 1934, as amended, which vest authority in the Federal Communications Commission to issue licenses to radio stations when it is found that the public

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interest, convenience, and necessity would be served thereby, and to require the painting, and/or illumination of antenna structures if and when in its judgment such structures constitute, or there is reasonable possibility that they may constitute, a menace to air navigation.

(b) The purpose of this part is to prescribe certain procedures for antenna structure registration and standards with respect to the Commission's consideration of proposed antenna structures which will serve as a guide to antenna structure owners. The standards are referenced from two Federal Aviation Administration (FAA) Advisory Circulars.

[61 FR 4362, Feb. 6, 1996]

§ 17.2 Definitions.

(a) *Antenna structure.* The term antenna structure includes the radiating and/or receive system, its supporting structures and any appurtenances mounted thereon.

(b) An antenna farm area is defined as a geographical location, with established boundaries, designated by the Federal Communications Commission, in which antenna towers with a common impact on aviation may be grouped.

(c) *Antenna structure owner.* For the purposes of this part, an antenna structure owner is the individual or entity vested with ownership, equitable ownership, dominion, or title to the antenna structure. Notwithstanding any agreements made between the owner and any entity designated by the owner to maintain the antenna structure, the owner is ultimately responsible for compliance with the requirements of this part.

(d) *Antenna structure registration number.* A unique number, issued by the Commission during the registration process, which identifies an antenna structure. Once obtained, this number must be used in all filings related to this structure.

[32 FR 8813, June 21, 1967, and 32 FR 11268, Aug. 3, 1967, as amended at 39 FR 26157, July 17, 1974; 61 FR 4362, Feb. 6, 1996]

§ 17.4 Antenna structure registration.

(a) Effective July 1, 1996, the owner of any proposed or existing antenna structure that requires notice of proposed construction to the Federal Aviation Administration must register the structure with the Commission. This includes those structures used as part of stations licensed by the Commission for the transmission of radio energy, or to be used as part of a cable television head end system. If a Federal Government antenna structure is to be used by a Commission licensee, the structure must be registered with the Commission.

(1) For a proposed antenna structure or alteration of an existing antenna structure, the owner must register the structure prior to construction or alteration.

(2) For an existing antenna structure that had been assigned painting or lighting requirements prior to July 1, 1996, the owner must register the structure prior to July 1, 1998.

(3) For a structure that did not originally fall under the definition of "antenna structure," the owner must register the structure prior to hosting a Commission licensee.

(b) Except as provided in paragraph (e) of this section, each owner must file FCC Form 854 with the Commission. Additionally, each owner of a proposed structure referred to in paragraphs (a)(1) or (a)(3) of this section must submit a valid FAA determination of "no hazard." In order to be considered valid by the Commission, the FAA determination of "no hazard" must not have expired prior to the date on which FCC Form 854 is received by the Commission. The height of the structure will include the highest point of the structure including any obstruction lighting or lighting arrester.

(c) Each prospective applicant must complete the environmental notification process described in this paragraph, except as specified in paragraph (c)(1) of this section.

(1) *Exceptions from the environmental notification process.* Completion of the environmental notification process is not required when FCC Form 854 is submitted solely for the following purposes:

(i) For notification only, such as to report a change in ownership or contact information, or the dismantlement of an antenna structure;

(ii) For a reduction in height of an antenna structure or an increase in height that does not constitute a substantial increase in size as defined in paragraph I(C)(1)–(3) of Appendix B to part 1 of this chapter, provided that there is no construction or excavation more than 30 feet beyond the existing antenna structure property;

(iii) For removal of lighting from an antenna structure or adoption of a more preferred or equally preferred lighting style. For this purpose lighting styles are ranked as follows (with the most preferred lighting style listed first and the least preferred listed last): no lights; FAA Lighting Styles that do not involve use of red steady lights; and FAA Lighting Styles that involve use of red steady lights. A complete description of each FAA Lighting Style and the manner in which it is to be deployed can be found in the current version of FAA, U.S. Dept. of Transportation, Advisory Circular: Obstruction Marking and Lighting, AC 70/7460;

(iv) For replacement of an existing antenna structure at the same geographic location that does not require an Environmental Assessment (EA) under §1.1307(a) through (d) of this chapter, provided the new structure will not use a less preferred lighting style, there will be no substantial increase in size as defined in paragraph I(C)(1)–(3) of Appendix B to part 1 of this chapter, and there will be no construction or excavation more than 30 feet beyond the existing antenna structure property;

(v) For any other change that does not alter the physical structure, lighting, or geographic location of an existing structure; or

(vi) For construction, modification, or replacement of an antenna structure on Federal land where another Federal agency has assumed responsibility for evaluating the potentially significant environmental effect of the proposed antenna structure on the quality of the human environment and for invoking any required environmental impact statement process, or for any other structure where another Federal agen-

cy has assumed such responsibilities pursuant to a written agreement with the Commission. *See* §1.1311(e) of this chapter.

(2) *Commencement of the environmental notification process.* The prospective applicant shall commence the environmental notification process by filing information about the proposed antenna structure with the Commission. This information shall include, at a minimum, all of the information required on FCC Form 854 regarding ownership and contact information, geographic location, and height, as well as the type of structure and anticipated lighting. The Wireless Telecommunications Bureau may utilize a partially completed FCC Form 854 to collect this information.

(3) *Local notice.* The prospective applicant must provide local notice of the proposed new antenna structure or modification of an existing antenna structure through publication in a newspaper of general circulation or other appropriate means, such as through the public notification provisions of the relevant local zoning process. The local notice shall contain all of the descriptive information as to geographic location, configuration, height and anticipated lighting specifications reflected in the submission required pursuant to paragraph (c)(2) of this section. It must also provide information as to the procedure for interested persons to file Requests for environmental processing pursuant to §§1.1307(c) and 1.1313(b) of this chapter, including any assigned file number, and state that such Requests may only raise environmental concerns.

(4) *National notice.* On or after the local notice date provided by the prospective applicant, the Commission shall post notification of the proposed construction on its Web site. This posting shall include the information contained in the initial filing with the Commission or a link to such information. The posting shall remain on the Commission's Web site for a period of 30 days.

(5) *Requests for environmental processing.* Any Request filed by an interested person pursuant to §§1.1307(c) and 1.1313(b) of this chapter must be received by the Commission no later

than 30 days after the proposed antenna structure goes on notice pursuant to paragraph (c)(4) of this section. The Wireless Telecommunications Bureau shall establish by public notice the process for filing Requests for environmental processing and responsive pleadings consistent with the following provisions.

(i) *Service and pleading cycle.* The interested person or entity shall serve a copy of its Request on the prospective ASR applicant pursuant to §1.47 of this chapter. Oppositions may be filed no later than 10 days after the time for filing Requests has expired. Replies to oppositions may be filed no later than 5 days after the time for filing oppositions has expired. Oppositions shall be served upon the Requester, and replies shall be served upon the prospective applicant.

(ii) *Content.* An Environmental Request must state why the interested person or entity believes that the proposed antenna structure or physical modification of an existing antenna structure may have a significant impact on the quality of the human environment for which an Environmental Assessment must be considered by the Commission as required by §1.1307 of this chapter, or why an Environmental Assessment submitted by the prospective ASR applicant does not adequately evaluate the potentially significant environmental effects of the proposal. The Request must be submitted as a written petition filed either electronically or by hard copy setting forth in detail the reasons supporting Requester's contentions.

(6) *Amendments.* The prospective applicant must file an amendment to report any substantial change in the information provided to the Commission. An amendment will not require further local or national notice if the only reported change is a reduction in the height of the proposed new or modified antenna structure; if proposed lighting is removed or changed to a more preferred or equally preferred lighting style as set forth in paragraph (c)(1)(iii) of this section; or if the amendment reports only administrative changes that are not subject to the requirements specified in this paragraph. All other changes to the phys-

ical structure, lighting, or geographic location data for a proposed registered antenna structure require additional local and national notice and a new period for filing Requests pursuant to paragraphs (c)(3), (c)(4), and (c)(5) of this section.

(7) *Environmental Assessments.* If an Environmental Assessment (EA) is required under §1.1307 of this chapter, the antenna structure registration applicant shall attach the EA to its environmental submission, regardless of any requirement that the EA also be attached to an associated service-specific license or construction permit application. The contents of an EA are described in §§1.1308 and 1.1311 of this chapter. The EA may be provided either with the initial environmental submission or as an amendment. If the EA is submitted as an amendment, the Commission shall post notification on its Web site for another 30 days pursuant to paragraph (c)(4) of this section and accept additional Requests pursuant to paragraph (c)(5) of this section. However, additional local notice pursuant to paragraph (c)(3) of this section shall not be required unless information has changed pursuant to paragraph (c)(6) of this section. The applicant shall serve a copy of the EA upon any party that has previously filed a Request pursuant to paragraph (c)(5) of this section.

(8) *Disposition.* The processing Bureau shall resolve all environmental issues, in accordance with the environmental regulations (47 CFR 1.1301 through 1.1319) specified in part 1 of this chapter, before the tower owner, or the first tenant licensee acting on behalf of the owner, may complete the antenna structure registration application. In a case where no EA is submitted, the Bureau shall notify the applicant whether an EA is required under §1.1307(c) or (d) of this chapter. In a case where an EA is submitted, the Bureau shall either grant a Finding of No Significant Impact (FONSI) or notify the applicant that further environmental processing is required pursuant to §1.1308 of this chapter. Upon filing the completed antenna structure registration application, the applicant shall certify that the construction will not have a significant environmental impact, unless

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an Environmental Impact Statement is prepared pursuant to § 1.1314 of this chapter.

(9) *Transition rule.* An antenna structure registration application that is pending with the Commission as of the effective date of this paragraph (c) shall not be required to complete the environmental notification process set forth in this paragraph. The Commission will publish a document in the FEDERAL REGISTER announcing the effective date. However, if such an application is amended in a manner that would require additional notice pursuant to paragraph (c)(6) of this section, then such notice shall be required.

(d) If a final FAA determination of “no hazard” is not submitted along with FCC Form 854, processing of the registration may be delayed or disapproved.

(e) If the owner of the antenna structure cannot file FCC Form 854 because it is subject to a denial of Federal benefits under the Anti-Drug Abuse Act of 1988, 21 U.S.C. 862, the first tenant licensee authorized to locate on the structure (excluding tenants that no longer occupy the structure) must register the structure using FCC Form 854, and provide a copy of the Antenna Structure Registration (FCC Form 854R) to the owner. The owner remains responsible for providing a copy of FCC Form 854R to all tenant licensees on the structure and for posting the registration number as required by paragraph (g) of this section.

(f) The Commission shall issue, to the registrant, FCC Form 854R, Antenna Structure Registration, which assigns a unique Antenna Structure Registration Number. The structure owner shall immediately provide a copy of Form 854R to each tenant licensee and permittee.

(g) Except as described in paragraph (h) of this section, the Antenna Structure Registration Number must be displayed in a conspicuous place so that it is readily visible near the base of the antenna structure. Materials used to display the Antenna Structure Registration Number must be weather-resistant and of sufficient size to be easily seen at the base of the antenna structure.

(h) The owner is not required to post the Antenna Structure Registration Number in cases where a federal, state, or local government entity provides written notice to the owner that such a posting would detract from the appearance of a historic landmark. In this case, the owner must make the Antenna Structure Registration Number available to representatives of the Commission, the FAA, and the general public upon reasonable demand.

[61 FR 4362, Feb. 6, 1996, as amended at 77 FR 3953, Jan. 26, 2012]

§ 17.5 Commission consideration of applications for station authorization.

(a) Applications for station authorization, excluding services authorized on a geographic basis, are reviewed to determine whether there is a requirement that the antenna structure in question must be registered with the Commission.

(b) If registration is required, the registrant must supply the structure's registration number upon request by the Commission.

(c) If registration is not required, the application for authorization will be processed without further regard to this chapter.

[61 FR 4362, Feb. 6, 1996]

§ 17.6 Responsibility of Commission licensees and permittees.

(a) The antenna structure owner is responsible for maintaining the painting and lighting in accordance with this part. However, if a licensee or permittee authorized on an antenna structure is aware that the structure is not being maintained in accordance with the specifications set forth on the Antenna Structure Registration (FCC Form 854R) or the requirements of this part, or otherwise has reason to question whether the antenna structure owner is carrying out its responsibility under this part, the licensee or permittee must take immediate steps to ensure that the antenna structure is brought into compliance and remains in compliance. The licensee must:

(1) Immediately notify the structure owner;

(2) Immediately notify the site management company (if applicable);

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(3) Immediately notify the Commission; and,

(4) Make a diligent effort to immediately bring the structure into compliance.

(b) In the event of non-compliance by the antenna structure owner, the Commission may require each licensee and permittee authorized on an antenna structure to maintain the structure, for an indefinite period, in accordance with the Antenna Structure Registration (FCC Form 854R) and the requirements of this part.

(c) If the owner of the antenna structure cannot file FCC Form 854 because it is subject to a denial of Federal benefits under the Anti-Drug Abuse Act of 1988, 21 U.S.C. 862, the first licensee authorized to locate on the structure must register the structure using FCC Form 854, and provide a copy of the Antenna Structure Registration (FCC Form 854R) to the owner. The owner remains responsible for providing a copy of FCC Form 854R to all tenant licensees on the structure and for posting the registration number as required by § 17.4(g).

[61 FR 4363, Feb. 6, 1996]

Subpart B—Federal Aviation Administration Notification Criteria

§ 17.7 Antenna structures requiring notification to the FAA.

A notification to the Federal Aviation Administration is required, except as set forth in § 17.14, for any of the following construction or alteration:

(a) Any construction or alteration of more than 60.96 meters (200 feet) in height above ground level at its site.

(b) Any construction or alteration of greater height than an imaginary surface extending outward and upward at one of the following slopes:

(1) 100 to 1 for a horizontal distance of 6.10 kilometers (20,000 feet) from the nearest point of the nearest runway of each airport specified in paragraph (d) of this section with at least one runway more than 0.98 kilometers (3,200 feet) in actual length, excluding heliports.

(2) 50 to 1 for a horizontal distance of 3.05 kilometers (10,000 feet) from the nearest point of the nearest runway of

each airport specified in paragraph (d) of this section with its longest runway no more than 0.98 kilometers (3,200 feet) in actual length, excluding heliports.

(3) 25 to 1 for a horizontal distance of 1.52 kilometers (5,000 feet) from the nearest point of the nearest landing and takeoff area of each heliport specified in paragraph (d) of this section.

(c) When requested by the FAA, any construction or alteration that would be in an instrument approach area (defined in the FAA standards governing instrument approach procedures) and available information indicates it might exceed an obstruction standard of the FAA.

(d) Any construction or alteration on any of the following airports (including heliports):

(1) An airport that is available for public use and is listed in the Airport Directory of the current Airman's Information Manual or in either the Alaska or Pacific Airman's Guide and Chart Supplement.

(2) An airport under construction, that is the subject of a notice or proposal on file with the Federal Aviation Administration, and except for military airports, it is clearly indicated that the airport will be available for public use.

(3) An airport that is operated by an armed force of the United States.

NOTE: Consideration to aeronautical facilities not in existence at the time of the filing of the application for radio facilities will be given only when proposed airport construction or improvement plans are on file with the Federal Aviation Administration as of the filing date of the application for such radio facilities.

[39 FR 7581, Feb. 27, 1974, as amended at 39 FR 26157, July 17, 1974; 42 FR 54823, Oct. 11, 1977; 42 FR 57127, Nov. 1, 1977]

§ 17.8 Establishment of antenna farm areas.

(a) Each antenna farm area will be established by an appropriate rule-making proceeding, which may be commenced by the Commission on its own motion after consultation with the FAA, upon request of the FAA, or as a result of a petition filed by any interested person. After receipt of a petition from an interested person disclosing

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sufficient reasons to justify institution of a rulemaking proceeding, the Commission will request the advice of the FAA with respect to the considerations of menace to air navigation in terms of air safety which may be presented by the proposal. The written communication received from the FAA in response to the Commission's request shall be placed in the Commission's public rulemaking file containing the petition, and interested persons shall be allowed a period of 30 days within which to file statements with respect thereto. Such statements shall also be filed with the Administrator of the FAA with proof of such filing to be established in accordance with §1.47 of this chapter. The Administrator of the FAA shall have a period of 15 days within which to file responses to such statements. If the Commission, upon consideration of the matters presented to it in accordance with the above procedure, is satisfied that establishment of the proposed antenna farm would constitute a menace to air navigation for reasons of air safety, rulemaking proceedings will not be instituted. If rulemaking proceedings are instituted, any person filing comments therein which concern the question of whether the proposed antenna farm will constitute a menace to air navigation shall file a copy of the comments with the Administrator of the FAA. Proof of such filing shall be established in accordance with §1.47 of this chapter.

(b) Nothing in this subpart shall be construed to mean that only one antenna farm area will be designated for a community. The Commission will consider on a case-by-case basis whether or not more than one antenna farm area shall be designated for a particular community.

[32 FR 8813, June 21, 1967, as amended at 32 FR 13591, Sept. 28, 1967]

§ 17.9 Designated antenna farm areas.

The areas described in the following paragraphs of this section are established as antenna farm areas [appropriate paragraphs will be added as necessary].

[32 FR 8813, June 21, 1967]

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§ 17.10 Antenna structures over 304.80 meters (1,000 feet) in height.

Where one or more antenna farm areas have been designated for a community or communities (see §17.9), the Commission will not accept for filing an application to construct a new station or to increase height or change antenna location of an existing station proposing the erection of an antenna structure over 304.80 meters (1,000 feet) above ground unless:

(a) It is proposed to locate the antenna structure in a designated antenna farm area, or

(b) It is accompanied by a statement from the Federal Aviation Administration that the proposed structure will not constitute a menace to air navigation, or

(c) It is accompanied by a request for waiver setting forth reasons sufficient, if true, to justify such a waiver.

[32 FR 8813, June 21, 1967, as amended at 42 FR 54824, Oct. 11, 1977; 61 FR 4363, Feb. 6, 1996]

§ 17.14 Certain antenna structures exempt from notification to the FAA.

A notification to the Federal Aviation Administration is not required for any of the following construction or alteration:

(a) Any object that would be shielded by existing structures of a permanent and substantial character or by natural terrain or topographic features of equal or greater height, *and* would be located in the congested area of a city, town, or settlement where it is evident beyond all reasonable doubt that the structure so shielded will not adversely affect safety in air navigation. Applicant claiming such exemption under §17.14(a) shall submit a statement with their application to the FCC explaining basis in detail for their finding.

(b) Any antenna structure of 6.10 meters (20 feet) or less in height except one that would increase the height of another antenna structure.

(c) Any air navigation facility, airport visual approach or landing aid, aircraft arresting device, or meteorological device, of a type approved by the Administrator of the Federal Aviation Administration, the location and

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height of which is fixed by its functional purpose.

[32 FR 11269, Aug. 3, 1967, as amended at 39 FR 7581, Feb. 27, 1974; 42 FR 54824, Oct. 11, 1977; 61 FR 4363, Feb. 6, 1996]

§ 17.17 Existing structures.

(a) The requirements found in § 17.23 relating to painting and lighting of antenna structures shall not apply to those structures authorized prior to July 1, 1996. Previously authorized structures may retain their present painting and lighting specifications, so long as the overall structure height or site coordinates do not change. The Antenna Structure Registration requirements found in § 17.5, however, shall apply to all antenna structures that have been assigned painting or lighting requirements by the Commission, regardless of prior authorization.

(b) No change in any of these criteria or relocation of airports shall at any time impose a new restriction upon any then existing or authorized antenna structure or structures.

[32 FR 11269, Aug. 3, 1967, as amended at 61 FR 4363, Feb. 6, 1996]

Subpart C—Specifications for Obstruction Marking and Lighting of Antenna Structures

§ 17.21 Painting and lighting, when required.

Antenna structures shall be painted and lighted when:

(a) They exceed 60.96 meters (200 feet) in height above the ground or they require special aeronautical study.

(b) The Commission may modify the above requirement for painting and/or lighting of antenna structures, when it is shown by the applicant that the absence of such marking would not impair the safety of air navigation, or that a lesser marking requirement would insure the safety thereof.

[32 FR 11269, Aug. 3, 1967, as amended at 42 FR 54824, Oct. 11, 1977]

§ 17.22 Particular specifications to be used.

Whenever painting or lighting is required, the Commission will generally assign specifications in accordance with the FAA Advisory Circulars ref-

erenced in § 17.23. If an antenna installation is of such a nature that its painting and lighting in accordance with these specifications are confusing, or endanger rather than assist airmen, or are otherwise inadequate, the Commission will specify the type of painting and lighting or other marking to be used in the individual situation.

[32 FR 11269, Aug. 3, 1967, as amended at 61 FR 4363, Feb. 6, 1996]

§ 17.23 Specifications for painting and lighting antenna structures.

Unless otherwise specified by the Commission, each new or altered antenna structure to be registered on or after January 1, 1996, must conform to the FAA's painting and lighting recommendations set forth on the structure's FAA determination of "no hazard," as referenced in the following FAA Advisory Circulars: AC 70/7460-1J, "Obstruction Marking and Lighting," effective January 1, 1996, and AC 150/5345-43E, "Specification for Obstruction Lighting Equipment," dated October 19, 1995. These documents are incorporated by reference in accordance with 5 U.S.C. 552(a). The documents contain FAA recommendations for painting and lighting structures which pose a potential hazard to air navigation. For purposes of this part, the specifications, standards, and general requirements stated in these documents are mandatory. The Advisory Circulars listed are available for inspection at the Commission Headquarters in Washington, DC, or may be obtained from Department of Transportation, Property Use and Storage Section, Subsequent Distribution Office, M483.6, Ardmore East Business Center, 3341 Q 75th Avenue, Landover, MD 20785, telephone (301) 322-4961, facsimile (301) 386-5394. Copies are also available for public inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

[64 FR 27474, May 20, 1999, as amended at 69 FR 18803, Apr. 9, 2004]

§§ 17.24–17.43

AVIATION RED OBSTRUCTION LIGHTING
[RESERVED]

§§ 17.24–17.43 [Reserved]

§ 17.45 Temporary warning lights.

During construction of an antenna structure, for which red obstruction lighting is required, at least two 116- or 125-watt lamps (A21/TS) enclosed in aviation red obstruction light globes, shall be installed at the uppermost point of the structure. The intensity of each lamp shall not be less than 32.5 candelas. In addition, as the height of the structure exceeds each level at which permanent obstruction lights will be required, two similar lights shall be installed at each such level. These temporary warning lights shall be displayed nightly from sunset to sunrise until the permanent obstruction lights have been installed and placed in operation, and shall be positioned so as to insure unobstructed visibility of at least one of the lights at any normal angle of approach. If practical, the permanent obstruction lights may be installed and operated at each required level as construction progresses.

[32 FR 11273, Aug. 3, 1967, as amended at 39 FR 26157, July 17, 1974; 42 FR 54826, Oct. 11, 1977]

§ 17.47 Inspection of antenna structure lights and associated control equipment.

The owner of any antenna structure which is registered with the Commission and has been assigned lighting specifications referenced in this part:

(a)(1) Shall make an observation of the antenna structure's lights at least once each 24 hours either visually or by observing an automatic properly maintained indicator designed to register any failure of such lights, to insure that all such lights are functioning properly as required; or alternatively,

(2) Shall provide and properly maintain an automatic alarm system designed to detect any failure of such lights and to provide indication of such failure to the owner.

(b) Shall inspect at intervals not to exceed 3 months all automatic or mechanical control devices, indicators, and alarm systems associated with the

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antenna structure lighting to insure that such apparatus is functioning properly.

[61 FR 4363, Feb. 6, 1996]

§ 17.48 Notification of extinguishment or improper functioning of lights.

The owner of any antenna structure which is registered with the Commission and has been assigned lighting specifications referenced in this part:

(a) Shall report immediately by telephone or telegraph to the nearest Flight Service Station or office of the Federal Aviation Administration any observed or otherwise known extinguishment or improper functioning of any top steady burning light or any flashing obstruction light, regardless of its position on the antenna structure, not corrected within 30 minutes. Such reports shall set forth the condition of the light or lights, the circumstances which caused the failure, the probable date for restoration of service, the FCC Antenna Structure Registration Number, the height of the structure (AGL and AMSL if known) and the name, title, address, and telephone number of the person making the report. Further notification by telephone or telegraph shall be given immediately upon resumption of normal operation of the light or lights.

(b) An extinguishment or improper functioning of a steady burning side intermediate light or lights, shall be corrected as soon as possible, but notification to the FAA of such extinguishment or improper functioning is not required.

[32 FR 11273, Aug. 3, 1967, as amended at 39 FR 26157, July 17, 1974; 40 FR 30267, July 18, 1975; 61 FR 4364, Feb. 6, 1996]

§ 17.49 Recording of antenna structure light inspections in the owner record.

The owner of each antenna structure which is registered with the Commission and has been assigned lighting specifications referenced in this part must maintain a record of any observed or otherwise known extinguishment or improper functioning of a structure light and include the following information for each such event:

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(a) The nature of such extinguishment or improper functioning.

(b) The date and time the extinguishment or improper operation was observed or otherwise noted.

(c) Date and time of FAA notification, if applicable.

(d) The date, time and nature of adjustments, repairs, or replacements made.

[48 FR 38477, Aug. 24, 1983, as amended at 61 FR 4364, Feb. 6, 1996]

§ 17.50 Cleaning and repainting.

Antenna structures requiring painting under this part shall be cleaned or repainted as often as necessary to maintain good visibility.

[61 FR 4364, Feb. 6, 1996]

§ 17.51 Time when lights should be exhibited.

(a) All red obstruction lighting shall be exhibited from sunset to sunrise unless otherwise specified.

(b) All high intensity and medium intensity obstruction lighting shall be exhibited continuously unless otherwise specified.

[40 FR 30267, July 18, 1975, as amended at 61 FR 4364, Feb. 6, 1996]

§ 17.53 Lighting equipment and paint.

The lighting equipment, color or filters, and shade of paint referred to in the specifications are further defined in the following government and/or Army-Navy aeronautical specifications, bulletins, and drawings (lamps are referred to by standard numbers):

Outside white	TT-P-102 ¹ (Color No. 17875, FS-595).
Aviation surface orange	TT-P-59 ¹ (Color No. 12197, FS-595).
Aviation surface orange, enamel.	TT-E-489 ¹ (Color No. 12197, FS-595).
Aviation red obstruction light—color.	MIL-C-25050 ² .
Flashing beacons	CAA-446 ³ Code Beacons, 300 mm.
Do	MIL-6273 ² .
Double and single obstruction light.	L-810 ³ (FAA AC No. 150/5345-2 ⁴).
Do	MIL-L-7830 ² .
High intensity white obstruction light.	FAA/DOD L-856 (FAA AC No. 150/5345-43B ⁴).
116-Watt lamp	No. 116 A21/TS (6,000 h).
125-Watt lamp	No. 125 A21/TS (6,000 h).
620-Watt lamp	No. 620 PS-40 (3,000 h).

700-Watt lamp	No. 700 PS-40 (6,000 h).
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¹Copies of this specification can be obtained from the Specification Activity, Building 197, Room 301, Naval Weapons Plant, 1st and N Streets, SE., Washington, D.C. 20407.

²Copies of Military specifications can be obtained by contacting the Commanding Officer, Naval Publications and Forms Center, 5801 Tabor Ave., Attention: NPPC-105, Philadelphia, Pa. 19120.

³Copies of Federal Aviation Administration specifications may be obtained from the Chief, Configuration Control Branch, AAF-110, Department of Transportation, Federal Aviation Administration, 800 Independence Avenue SW., Washington, D.C. 20591.

⁴Copies of Federal Aviation Administration advisory circulars may be obtained from the Department of Transportation, Publications Section, TAD-443.1, 400 7th St. SW., Washington, D.C. 20590.

[33 FR 11540, Aug. 14, 1968, as amended at 40 FR 30267, July 18, 1975]

§ 17.54 Rated lamp voltage.

To insure the necessary lumen output by obstruction lights, the rated voltage of incandescent lamps used shall correspond to be within 3 percent higher than the voltage across the lamp socket during the normal hours of operation.

[42 FR 54826, Oct. 11, 1977]

§ 17.56 Maintenance of lighting equipment.

(a) Replacing or repairing of lights, automatic indicators or automatic control or alarm systems shall be accomplished as soon as practicable.

(b) The flash tubes in a high intensity obstruction lighting system shall be replaced whenever the peak effective daytime intensity falls below 200,000 candelas.

[40 FR 30267, July 18, 1975]

§ 17.57 Report of radio transmitting antenna construction, alteration, and/or removal.

The owner of an antenna structure for which an Antenna Structure Registration Number has been obtained must notify the Commission within 24 hours of completion of construction (FCC Form 854-R) and/or dismantlement (FCC Form 854). The owner must also immediately notify the Commission using FCC Form 854 upon any change in structure height or change in ownership information.

[61 FR 4364, Feb. 6, 1996]

§ 17.58

§ 17.58 Facilities to be located on land under the jurisdiction of the U.S. Forest Service or the Bureau of Land Management.

Any application proposing new or modified transmitting facilities to be located on land under the jurisdiction of the U.S. Forest Service or the Bureau of Land Management shall include a statement that the facilities will be so located, and the applicant shall comply with the requirements of § 1.70 of this chapter.

[32 FR 11274, Aug. 3, 1967]

PART 18—INDUSTRIAL, SCIENTIFIC, AND MEDICAL EQUIPMENT

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AUTHORITY: 47 U.S.C. 4, 301, 302, 303, 304, 307.

SOURCE: 50 FR 36067, Sept. 5, 1985, unless otherwise noted.

Subpart A—General Information

§ 18.101 Basis and purpose.

The rules in this part, in accordance with the applicable treaties and agreements to which the United States is a

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party, are promulgated pursuant to section 302 of the Communications Act of 1934, as amended, vesting the Federal Communications Commission with authority to regulate industrial, scientific, and medical equipment (ISM) that emits electromagnetic energy on frequencies within the radio frequency spectrum in order to prevent harmful interference to authorized radio communication services. This part sets forth the conditions under which the equipment in question may be operated.

§ 18.107 Definitions.

(a) *Radio frequency (RF) energy.* Electromagnetic energy at any frequency in the radio spectrum from 9 kHz to 3 THz (3,000 GHz).

(b) *Harmful interference.* Interference which endangers the functioning of a radionavigation service or of other safety services or seriously degrades, obstructs or repeatedly interrupts a radiocommunication service operating in accordance with this chapter.

(c) *Industrial, scientific, and medical (ISM) equipment.* Equipment or appliances designed to generate and use locally RF energy for industrial, scientific, medical, domestic or similar purposes, excluding applications in the field of telecommunication. Typical ISM applications are the production of physical, biological, or chemical effects such as heating, ionization of gases, mechanical vibrations, hair removal and acceleration of charged particles.

(d) *Industrial heating equipment.* A category of ISM equipment used for or in connection with industrial heating operations utilized in a manufacturing or production process.

(e) *Medical diathermy equipment.* A category of ISM equipment used for therapeutic purposes, not including surgical diathermy apparatus designed for intermittent operation with low power.

(f) *Ultrasonic equipment.* A category of ISM equipment in which the RF energy is used to excite or drive an electromechanical transducer for the production of sonic or ultrasonic mechanical energy for industrial, scientific, medical or other noncommunication purposes.